

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
17 March 2005 (17.03.2005)

PCT

(10) International Publication Number
WO 2005/024813 A1

(51) International Patent Classification⁷: **G11B 7/26**

Hanyang Apt., Seohyun-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-776 (KR). **KIM, Hyun-Ki** [KR/KR]; 216-702 Shinyoungtong Hyundai Apt., 868, Banwol-ri, Taean-eup, Hwaseong-si, Gyeonggi-do 445-983 (KR).

(21) International Application Number:
PCT/KR2004/002198

(74) Agent: **LEE, Young-Pil**; The cheonghwa Building, 1571-18, Seocho-dong, Seocho-gu, Seoul 137-874 (KR).

(22) International Filing Date:
1 September 2004 (01.09.2004)

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
10-2003-0062421

6 September 2003 (06.09.2003) KR
10-2004-0018002 17 March 2004 (17.03.2004) KR

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): **SAMSUNG ELECTRONICS CO., LTD.** [KR/KR]; 416, Mae-tan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742 (KR).

(72) Inventors; and

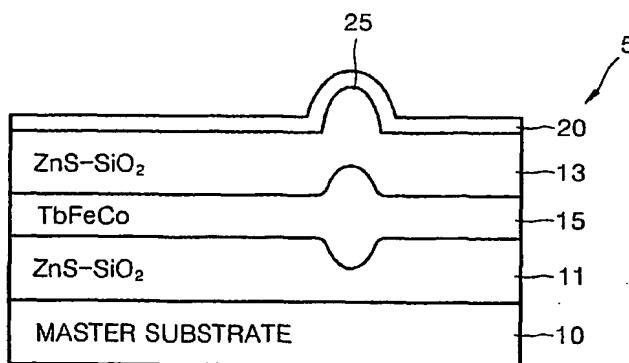
(75) Inventors/Applicants (for US only): **YOON, Du-Seop** [KR/KR]; 315-601 Sibeomdanji Hanyang Apt., Seohyun-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-776 (KR). **KIM, Joo-Ho** [KR/KR]; 103-901 SK Apt., Seocheon-ri, Giheung-eup, Yongin-si, Gyeonggi-do 449-959 (KR). **PARK, In-Sik** [KR/KR]; 615-801 Shin-namushil Kukdong Apt., 967-2, Yeongtong 2-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-733 (KR). **HWANG, In-Oh** [KR/KR]; 325-801 Sibeomdanji

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RECORDED MASTER FOR MANUFACTURING INFORMATION STORAGE MEDIUM AND METHOD OF MANUFACTURING THE MASTER



(57) Abstract: A recorded master for manufacturing an information storage medium and a method of manufacturing the master are provided. The recorded master includes: a master substrate; a heat absorption layer which is coated on the master substrate and absorbs heat at a part on which a beam is irradiated; and a separation layer which is coated on the heat absorption layer, wherein according to the temperature distribution of the part on which the beam is irradiated, a volume change occurs in at least one of the heat absorption layer and the separation layer. With this structure, a stamper can be easily separated from a transform layer, a recorded master with a low surface roughness can be provided, and a high density information storage medium can be manufactured.

WO 2005/024813 A1